

135. The method of claim **128**, wherein the cancer is selected from the group consisting of ovarian cancer, breast cancer, uterine cancer, pancreatic cancer, renal cancer, peritoneal cancer, and lung cancer.

136. The method of claim **128**, wherein the cancer is endometrial cancer.

137. A method of treating cancer in a subject, comprising administering a therapeutically effective amount of an immunoconjugate having the formula (A)-(L)-(C) to the subject, wherein:

(A) is the antibody or antigen binding fragment thereof of claim **128**;

(L) is a linker; and

(C) is a cytotoxic agent;

wherein (L) links (A) to (C).

138. The method of claim **137**, wherein the linker is a cleavable linker.

139. The method of claim **137**, wherein the linker is a non-cleavable linker;

140. The method of claim **137**, wherein the linker is a hydrophilic linker or a dicarboxylic acid based linker.

141. The method of claim **140**, wherein the linker is selected from the group consisting: N-succinimidyl 4-(2-pyridyldithio)pentanoate (SPP) or N-succinimidyl 4-(2-pyridyldithio)-2-sulfopentanoate (sulfo-SPP); N-succinimidyl 4-(2-pyridyldithio)butanoate (SPDB) or N-succinimidyl 4-(2-pyridyldithio)-2-sulfobutanoate (sulfo-

SPDB); N-succinimidyl 4-(maleimidomethyl) cyclohexanecarboxylate (SMCC); N-sulfosuccinimidyl 4-(maleimidomethyl) cyclohexanecarboxylate (sulfoSMCC); N-succinimidyl-4-(iodoacetyl)-aminobenzoate (SIAB); and N-succinimidyl-[(N-maleimidopropionamido)-tetraethyleneglycol] ester (NHS-PEG4-maleimide).

142. The method of claim **137**, wherein the cytotoxic agent is selected from the group consisting of a maytansinoid, benzodiazepine, taxoid, CC-1065, duocarmycin, calicheamicin, dolastatin, auristatin, tomaymycin and leptomyacin or a prodrug of the agent.

143. The method of claim **142**, wherein the maytansinoid is N(2')-deacetyl-N(2')-(3-mercapto-1-oxopropyl)-maytansine (DM1) or N(2')-deacetyl-N(2')-(4-mercapto-4-methyl-1-oxopentyl)-maytansine (DM4).

144. The method of claim **137**, wherein (L) is sulfo-SPDB and (C) is DM4.

145. The method of claim **137**, wherein the immunoconjugate comprises 2-6 (C) or 3-4 (C).

146. The method of claim **137**, wherein the cancer is selected from the group consisting of ovarian cancer, breast cancer, uterine cancer, pancreatic cancer, renal cancer, peritoneal cancer, and lung cancer.

147. The method of claim **137**, wherein the cancer is endometrial cancer.

* * * * *